UNITED STATES COAST GUARD

Address Reply to: COMMANDANT U. S. Coast Guard Headquarters Washington 25, D. C.

MVI
4 January 1951
File:(JOHN M. MCKERCHEY
2-9)

From: Chief, Merchant Vessel Inspection Division

To: Commandant

Via: Chief, Office of Merchant Marine Safety

Subj: Marine Board of Investigation; SS JOHN M. MCKERCHEY, foundering with loss of life, vicinity of Lorain Harbor, Ohio, on 16 October 1950.

- 1. Pursuant to the provisions of Title 46 CFR, Part 136, the record of the Marine Board convened to investigate subject casualty, together with its Findings of Fact, Conclusions, and Recommendations, has been reviewed and is forwarded herewith.
- 2. The SS JOHN M. MCKERCHEY, a sandsucker type vessel of 506 gross tons, built in 1906, took on a cargo of sand at a pumping ground located approximately 8 miles from Lorain and at 0115, 16 October 1950 proceeded to Lorain, Ohio. The weather was southeast wind, moderate sea, and clear visibility. Approximately 30 minutes following departure, water was discovered entering the forepeak tank, the ingress of which into the vessel could not be controlled with the result that the vessel settled and capsized at approximately 0230, 1 mile from Lorain, West Breakwater. The master apparently elected to remain with the vessel, although ample opportunity for abandonment was available, and because of such election, perished with the vessel.
- 3. The Board made the following Findings of Fact:
 - "(1) That the SS JOHN M. MCKERCHEY, official number 203204, of 506 gross tons, owned and operated by the Kelley Island Lime and Transport Company, Sandusky, Ohio, capsized in Lake Erie, 298 degrees, 6688 feet from Lorain, Ohio, kest Breakwater, 16 October 1950, at approximately 0230 (EST), with the loss of one life, the master, Horace Johnson, License #1335.
 - (2) That the last annual inspection of the vessel was 15 April 1950 at Toledo, Ohio. The vessel carried a crew of twenty and was fully manned at the time of the casualty. The last dry-docking of the vessel was at Lorain, Ohio, November 8 and 9, 1948.
 - (3) The vessel was of the following dimensions: Length, 161.2 feet; breadth, 37.1 feet; depth, 11 feet. She was a self-loading, self-unloading vessel, operated in the sand and gravel trade. The

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vessel loads itself by means of a fifteen inch dismeter hose operated by a diesel suction pump located forward on the forepeak deck. This diesel pump (Exhibit 3) sucked material (sand and gravel) from the lake bottom and deposited same in an open type cargo hold (one compartment). The cargo compartment was loaded to capacity, approximately 750 yards, which would make the cargo flush with the top of the cargo compartment.

- (4) The discharging of cargo is accomplished by means of a clam shell attached to a sixty foot boom (Exhibit 5). When not in use the boom rested in a cradle over the cargo hold. The unloading machinery was located on the forepeak deck (Exhibit 4). The operator in charge of the unloading operations was stationed in a cabin just aft and to starboard of the pilot house.
- (5) The aforementioned cargo suction hose was located on the port side of the vessel extending in a fore and aft direction. The after end was lowered to the lake buttom by means of a cable falls. The forward end of the hose pierced the shell plating and was connected to the outboard end of the suction pape. After the connection was made, two half round plates are placed around the suction hose. The purpose of these plates is to make the opening through the shell plate as watertight as possible. Ordinarily, ufter taking on cargo, the suction pipe is disconnected, hoisted up and secured. Plates are then put in the opening and secured by wedges to make the opening as watertight as possible. The space where the inboard end of the suction hose connects to the outboard end of the suction pipe is inclosed by a metal housing or casing (see Exhibit 3). There is a hinged watertight door on the forward side of this casing; to open this door it swung inhoard or from forward towards aft. The door is kept closed by means of lugs and thumb screws. There is one scuttle hatch on the forepeak deck louding down to the forepeak, (see Exhibit 4); this scuttle is equipped with a hinged watertight door; this door is raised in an upright position to open. It is secured with lugs and thumb screws. It is located on the starboard side of the unloading engine. There was no sounding pips leading into the forepeak. Soundings were taken by opening the watertight door leading down into the forepeak. Meens of removing the water from the forepeak was by pumping direct from the engine room. There was one five inch seacock in the forepeak used for boiler feed only. The seacock was wired shut.
- (6) A watertight bulkhead extended from the after end of the forepeak deck to the vessel's bottom. A raised deck two feet above the
 forepeak deck extended across the vessel. There were three bottom
 tanks (water-bottoms) separated by vertical and horizontal watertight bulkheads, (Exhibit 4). There was a man-hole with a water-

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tight cover leading from the top side into each tank. Each bank was equipped with a 1½ inch sounding pipe. The vessel was equipped with one scotch boiler, coal burning, hand fired, carried 130 pounds of steam. She was powered by twin screw reciprocating engines. She maintained a speed of eight miles per hour leaded, and nine miles per hour in ballast.

- (7) The vessel took on a cargo of sand at a pumping ground approximately seven and thres-quarters of a mile, 279 degrees from Lorain, Ohio, West Breakwater Light, (see Exhibit 1). She left the pumping ground at .0115, 16 October 1950, and headed for Lorain, Ohio. The wind was from the scutheast, moderate, weather clear, with a moderate sea running. The water was striking the vessel on the port box forward in the vicinity of where the suction pipe pierced the vessel's shall plating. Approximately one half hour after the vessel left the pumping ground the watchman found water entering the forepeak, approximately three to four feet. He reported the same to the pilot house. The master told him to notify the engineer to start the ballast pump. The watchman told the crane operator who in turn notified the engineer. The engineer commenced pumping on the forepeak. The second mate left the pilot house, went below to the forepeak deck and found that the forepeak had filled, and had overflown on the deck. He reported this to bridge then went around and aways the crow members that were in bed. He also ordered the lifeboat cleared and lowered. Prior to awaking the crew members he sounded the tanks and found six inches of water in number one tank starboard and thirteen inches of water in number three tank starboard. The vessel commenced to list to starboard.
- (8) The first assistant engineer (on watch at the time) wont forward and found the water knee deep on the forepeak deck. The water was coming out of the casing around the suction pipe as well as the forepeak running over the raised deck and into number one starboard tank. He found the watertight door on the casing and the watertight door on the scuttle hatch leading down to the forepeak open, and manhole to number one tank open. He stated that the water was running into number one starboard tank through the open manhole.
- (9) The engineer went aft and took the cuts off the engines. He then called the pilot house. The master told him he thought he could beach her. About this time the alarm bells switch was thrown in. The vessel kept listing to starboard and finally capsized. Shortly before she capsized, the first assistant engineer left the engine room, crawled out through the door on the port side and was picked up by the Coast Guard. The engines were still going when he left the engine room.

- "(1) That it is apparent that the vessel is a total loss.
- (2) That no Coast Guard personnel nor any representative of any other government agency caused nor contributed to the cause of the casualty.
- (3) That it is apparent that the Master knew his vessel was doomed. Whother or not the Master could have gotten off the vessel as she was capsizing cannot be determined. It is the opinion of this board that the Master had sufficient time to get off the vessel. The Master died of accidental drowning (see Coroner's report).

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- (4) That how the water entered the forepeak cannot be determined. The water was entering the forepeak faster than the pump could take it out. As the water rose in the forepeak the vessel kept going down by the head until the opening for the suction hose was submerged. The casing or housing enclosing this space filled with water. The water spilled out onto the forepeak deck through the watertight door on the casing.
- (5) That the watertight door on this casing, as was the watertight door leading to the forepeak and the man-hole cover on number one water-bottom starboard was open.
- (6) That the second mate on watch at the time the vessel left the pumping ground was responsible to see that all scuttles, doors, and so forth, were closed. He saw the water coming through the forepeak scuttle hatch but made no effort to close and clamp down the door. It is the opinion of this Board that had the second mate closed the scuttle hatch door leading down to the forepeak and the watertight door on the casing, there was a chance of the vessel's making Lorain Harbor or a possibility of beaching the vessel. Therefore, a charge of "Inattention to Duty" is being preferred against Louis Hasler, second mate."
- 5. The Board made the following Recommendation:
 - "(1) This Board recommends that vessels in this trade (sand and gravel) of the self-loading, self-unloading type be placed on dry-dock at least once every two years for sight and survey. It is suggested the regulations pertaining to this dry-docking be considered at the next Merchant Marine Council Meeting. This type of vessel is more or less on the bottom when unloading and does considerable rolling due to the swinging of the unloading clam shell. This rolling causes considerable wear and indentations on the bilge plating."

REMARKS

that vessels in the sand and gravel trade be placed on dry dock at least every two years for sight and survey is not approved. The marine inspectors have authority to require that a vessel be drydocked at any time they consider it necessary. They are required to assure themselves, by internal and external examination of the vessel at annual inspections, reinspections or other inspections, that the vessel is in good condition and a safe and suitable structure for the service in which it is employed, and that it is in a condition to warrant belief that it may be used in navigation with safety to life.

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7. Subject to the foregoing remarks, it is recommended that the Findings of Fact, Conclusions, and Recommendations of the Marine Board of Investigation be approved.

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From: Chief, Office of Merchant Marine Safety

To: Commandant

Forwarded, recommending approval.

/s/ H. C. SHEPHEARD H. C. SHEPHEARD

APPROVED: January 12, 1951

A. C. RICHMOND

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Rear Admiral, U. S. Coust Guard

Acting Commandant